Facts and ideas from anywhere

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THE DYING WEST

In 1960, planet earth contained 3 billion people, 750 million (25%) of whom were of European origin and living in Europe, the USA, Canada, and Australia. Forty years later, in 2000, the world population numbered 6 billion, and the percentage of European people on the planet had dropped to 17%. By 2050, it is estimated that the world population will be 9 billion and that those of European origin will number approximately 650 million, or 10% of the total. Of the 20 nations with the lowest birthrates in the world, 18 are in Europe. The average number of births per woman of childbearing age needed to replace a population is 2.1. The average fertility rate of a European woman has fallen to 1.4 children! If the present fertility rates hold, Europe's population will decline to 207 million people from its present 278 million by the end of the 21st century, a 30% reduction.

In Germany today, the birthrate is 1.3 children per woman. At this birthrate, by 2050 Germany's present population of 82 million people will fall to 59 million, and the number of German children <15 years of age will drop to 7.3 million. A third of Germany's population will be >65 years of age, and these seniors will outnumber German children more than 2 to 1. Germans will be among the oldest people on earth. The country's total population will be <1% of the world's population, or only 1 of every 150 people on earth will be a German.

Italy's birthrate is down to 1.2 children per woman, and the country's population of 57 million people will fall to 41 million by 2050. That year, only 2% of Italy's population will be <5 years of age, and >40% will be ≥65 years. A recent survey in a popular Italian magazine found that 52% of Italian women between ages 16 and 24 did not plan to have children. "Career" was their principal reason for not wanting kids.

The Spanish birthrate is the lowest in all of Europe, lower than that of Italy, the Czech Republic, or Romania, all of which have fallen to 1.2 children per woman. In Spain, the birthrate is down to 1.07 children per woman. In one generation, Spain has gone from a society in which families with 8 or even 12 children were not unusual to one in which childless couples are common or people at least think long and hard about having a second child. The population is projected to fall by 25% in 50 years as the number of Spaniards >65 years soars by 117%. By 2050, the median age in Italy will be 54 and in Spain 55, 14 years above the median age in Japan, the oldest nation on earth today.

In Russia, the birthrate today is 1.17 children per woman, and with that rate, Russia's present population of 145 million people will fall to 123 million by 2015 and to <110 million by 2050. A loss of 22 million Russians in 15 years would be greater than all the Soviet Union's losses in the Hitler-Stalin war. The life expectancy for Russian men is now 59 years. Now 2 of every 3 pregnancies in Russia are terminated before birth; Russian women average 2.5 to 4 abortions each. Russia's death rate is now 70% higher than its birthrate. Most ominous for the largest land area on earth, the population of vast vacant Siberia is in a steep decline as China's enormous population swells inexorably.

In the United Kingdom, the fertility rate has fallen to 1.66 births per woman, the lowest since statistics began to be kept in 1924. The first nation to voluntarily turn its white population into a minority will be the USA, but Great Britain will be the second. White people in London will be a minority by 2010.

Of the 22 nations with the lowest birthrates, only 2 are outside Europe, namely Armenia and Japan, the first Asian nation to enter the modern era. With American assistance and by copying American methods and ideas, post–World War II Japan became the most dynamic nation on earth. By 1990, Japan's economy was the second largest, half the size of the economy of the USA, although Japan occupied an area smaller than Montana, an extraordinary achievement of an extraordinary people. But Japan also has begun to die. Japan's birthrate is half what it was in 1950. Its population is projected to crest soon at 127 million but fall to 104 million by 2050, when there will be fewer than half as many Japanese children as there were in 1950 but 8 times as many seniors. By 2050, Japan's world role will certainly decline, for there will be 15 Chinese for every single Japanese. The Philippines, which had only a fourth of Japan's population in 1950, will have 25 million more people than Japan by 2050. Today, more than half of all Japanese women are still single at 30 years of age. They live at home with their parents and pursue careers, and many have abandoned any idea of marrying or having children. Of the 190 nations on earth, Japan is the oldest, with a median age of 41 years. Japan was the first modern nation to legalize abortion (1948), and its baby boom ended soon afterward, long before the end of the baby boom in the West.

What will the world look like by 2050? In Africa, there will 1.5 billion people. From Morocco to the Persian Gulf will be an

Arab-Turkish-Islamic world of 500 million. In South Asia will live 700 million Iranians, Afghans, Pakistanis, and Bangladeshis and 1.5 billion Indians. There will be 300 million Indonesians and 1.5 billion Chinese. Russia, with a population of only 110 million, will have largely disappeared from Asia. Almost all Russians will be west of the Urals, back in Europe. Humans of European origin will have disappeared from Africa and Asia by 2050 except for tiny enclaves in South Africa and Israel. In Australia, a nation of only 19 million, where the white birthrate is now below replacement levels, the European population will have begun to disappear.

At present birthrates, Europe must bring in 169 million immigrants by 2050 if it wishes to keep its population aged 15 to 64 at today's level. But, if Europe wishes to keep its present ratio of 4.8 workers aged 15 to 64 for every senior citizen, it must bring in 1.4 billion immigrants. Or to put it another way, either Europe must raise taxes and radically downsize pensions and health benefits for the elderly or it will become a third-world continent. If Europe's fertility rate does not rise, the number of European children under age 15 will fall by 40% to 87 million by 2050 as the number of seniors rises 50% to 169 million. The median age of a European will be 50, the highest in history, 9 years older than the present median age in Japan. Europe then will be a continent of old people in old houses.

Why are Western woman having fewer children than their mothers did or not having children at all? Western women have long had access to the methods and means of birth control but chose not to use the methods to the extent that they do today. For 30 years American women have had easy access to abortion, but unlike the women of China, they are also free to choose life. Yet, Western women are terminating their pregnancies at a rate that represents autogenocide for peoples of European ancestry and an end of their nations.

Why are children no longer cherished as they once were? What caused the change in the hearts and minds of Western women and men? Contraception halted the population growth of the West, with abortion as the second line of defense against the unwanted child. Historians may one day call "the pill" the suicide tablet of the West. It was first licensed in 1960, and by 1963, 6% of American married women were using it; by 1970, 43% were "on the pill." Abortions began to increase in the USA in the late 1960s. By 1966, 6000 abortions were being done each year in the USA; by 1970, that figure had jumped to 200,000, and by 1973, to 600,000. In 1973, the Supreme Court declared that a woman's right to an abortion was protected by the constitution. Within a decade the number of abortions had soared to 1.5 million a year, and abortion had replaced tonsillectomy as the most common surgical procedure in the USA. Since 1973, 40 million abortions have been performed in the USA, and now 30% of all pregnancies in the USA end in an abortion. In 2000, the Food and Drug Administration approved RU-486, a do-it-yourself abortion drug for use in the first 7 weeks of pregnancy. Since no US firm wished to be associated with RU-486, a China-based company began quietly producing the drug.

The above information was taken from a recent book entitled *The Death of the West* by Patrick J. Buchanan (1). The subtitle of his book is "How Dying Populations and Immigrant Invasions Imperil Our Country and Civilization." This book was called to my attention by my son Chuck. Whether one is for or against Pat Buchanan politically, the facts and predictions enclosed in his riveting book have not been questioned.

FAST FOOD AND QUICK PLAQUES

In 2001, Eric Schlosser published the book *Fast Food Nation*, and the following information comes from it (2).

Since 1970, fast food has infiltrated virtually every nook and cranny of American society. What began as a handful of modest hot dog and hamburger stands in Southern California has spread such that fast food is now served at restaurants and drive-throughs at stadiums, airports, zoos, high schools, elementary schools, universities, cruise ships, trains, airplanes, department stores, gas stations, and hospitals. In 1970, Americans spent about $8 billion on fast food: in 2000, they spent >$110 billion. Americans now spend more on fast food than on higher education, personal computers, computer software, or new cars. They spend more on fast food than on movies, books, magazines, newspapers, videos, and recorded music combined. Fast food has proven to be a revolutionary force in American life. What we eat or don't eat has always been determined by a complex interplay of social, economic, and technological forces. On any given day in the USA, about 25% of the adult population visits a fast food restaurant. During these past 30 years, the fast food industry has helped to transform not only the American diet but also our landscape, economy, workforce, and popular culture. A generation ago, 75% of the money used to buy food in the USA was spent to prepare meals at home. Today, about 50% of the money used to buy food is spent at restaurants, namely at fast food restaurants.

The McDonald's Corporation has become a powerful symbol of American service economy, which is now responsible for 90% of the country's new jobs. In 1968, McDonald's operated about 1000 restaurants. Today, it has 28,000 restaurants worldwide and opens almost 2000 new ones each year. An estimated 1 of every 8 workers in the USA has at some point been employed by McDonald's. The company annually hires about 1 million people, more than any other American organization, public or private. McDonald's is the nation's largest purchaser of beef, pork, and potatoes and the second largest purchaser of chicken. The McDonald's Corporation is the largest owner of retail property in the world. Indeed, the company earns most of its profits not from selling food but from collecting rent. McDonald's spends more money on advertising and marketing than any other brand. It has replaced Coca-Cola as the world's most famous brand. McDonald's operates more playgrounds than any other private entity in the USA. It is one of the nation's largest distributors of toys. Among American school children, Ronald McDonald now has a higher degree of recognition than Santa Claus. The Golden Arches are now more widely recognized than the Christian cross.

"McDonaldization," with its centralized purchasing decisions and standardized products, has given McDonald's and a few other fast food chain operators an unprecedented degree of power over the nation's food supply. That power has wiped out numerous small businesses, obliterated regional differences, and spread identical stores throughout the country. Each franchise strives to offer exactly the same product or service. None of the workers at the roughly 15,000 McDonald's in North America are rep-

resented by a union. The industrialization of the restaurant kitchen has enabled the fast food chains to rely upon a low-paid and unskilled workforce. Most of the fast food workers work part time (the average work week is 30 hours), receive no benefits, learn few skills, exercise little control over their workplace, quit or are fired after a few months, and float from job to job. The restaurant industry is now America's largest private employer, and it pays some of the lowest wages. During the economic boom of the 1990s, when many American workers enjoyed their first pay raises in a generation, the real value of wages in the restaurant industry continued to fall. The roughly 3.5 million fast food workers are by far the largest group of minimum wage earners in the USA. The only Americans who consistently earn a lower hourly wage are migrant farm workers. The annual turnover rate in the fast food industry is now about 300% to 400%.

A hamburger and french fries became the quintessential American meal in the 1950s, thanks to the promotional efforts of the fast food chains. The typical American today consumes approximately 3 hamburgers and 4 orders of french fries every week. Most fast food is delivered to the restaurant already frozen, canned, dehydrated, or freeze dried. A fast food kitchen is merely the final stage in a vast and highly complex system of mass production. What we eat has changed more in the past 40 years than in the previous 40,000!

The fast food industry took root alongside the interstate highway system, as a new form of restaurant sprang up beside the new off-ramps. In the potato fields and processing plants of Idaho, in the ranch lands east of Colorado Springs, in the feedlots and slaughterhouses of the High Plains, the effects of fast food on the nation's rural life, its environment, its workers, and its health are clearly visible. The fast food chains now stand atop a huge food industrial complex that has gained control of American agriculture. Farmers and cattle ranchers are losing their independence, essentially becoming hired hands for the agribusiness giants or being forced off the land. Family farms are now being replaced by gigantic corporate farms with absentee owners. Small towns are now being turned into rural ghettos. The USA now has more prison inmates than full-time farmers. The suicide rate among ranchers and farmers in the USA is now about 3 times higher than the national average.

The fast food chains' vast purchasing power and their demand for a uniform product have encouraged fundamental changes in how cattle are raised, slaughtered, and processed into ground beef. These changes have made meatpacking—once a highly skilled, highly paid occupation—the most dangerous job in the USA, performed by armies of poor, transient immigrants, whose injuries often go unrecorded and uncompensated. And the same meat industry practices that endanger these workers have facilitated the introduction of deadly pathogens, such as *Escherichia coli* 0157:H7, into America's hamburger meat, a food aggressively marketed to children. Again and again, efforts to prevent the sale of tainted ground beef have been thwarted by meat industry lobbyists and their allies in congress. The federal government lacks the power to recall tons of contaminated, potentially lethal meat.

The impact of fast food on the nation's children is enormous. Fast food is heavily marketed to children and prepared by people who are barely older than children. This is an industry that both feeds and feeds off the young. Unfortunately, fast food has been carefully designed to taste good. That is the main reason people buy it. It is also inexpensive and convenient. But the value meals, 2-for-1 deals, and free refills of soda give a distorted sense of how much fast food actually costs. The real price never appears on the menu.

Unfortunately, too many consider the fast food industry proof of the nation's great economic vitality, a beloved American institution that appeals to millions overseas who admire our way of life. Indeed, the values, the culture, and the industrial arrangements of our fast food nation are now being exported to the rest of the world. Fast food has joined Hollywood movies, blue jeans, and pop music as one of America's most prominent cultural exports. Unlike other commodities, however, fast food isn't viewed, read, played, or worn. It enters the body and becomes part of the consumer. The hundreds of millions of people who buy fast food every day rarely consider where the food came from, how it was made, or what it is doing to the community around them. They just grab their tray off the counter, find a table, take a seat, unwrap the paper, and dig in. The whole experience is transitory and soon forgotten. Unfortunately, we are what we eat.

Every day in the USA roughly 200,000 people are sickened by a foodborne disease, 900 are hospitalized, and 14 die. According to the Centers for Disease Control and Prevention (CDC), >25% of the American population suffers a bout of food poisoning each year. Most of these cases are never reported to authorities or properly diagnosed. The widespread outbreaks that are detected and identified represent a small fraction of the number that actually occurs. There is strong evidence that not only has the incidence of food-related illness risen in the past few decades, but also the lasting health consequences of such illnesses are far more serious than was previously believed.

Although the rise in foodborne illnesses has been caused by many complex factors, much of the increase can be attributed to recent changes in how American food is produced. Robert B. Tauxe, head of the Foodborne and Diarrheal Diseases Branch at the CDC, believes that entirely new kinds of outbreaks are occurring. A generation ago, the typical outbreak of food poisoning involved a church supper, a family picnic, or a wedding reception. Improper food handling or storage would cause a small group in one local area to get sick. Such traditional outbreaks still take place. But the nation's industrialized and centralized system of food processing has created a whole new sort of outbreak, one that can potentially sicken millions of people. The *E. coli* 0157:H7 bacterium is a new pathogen whose spread has been facilitated by recent social and technological changes. It was first isolated in 1982. Although cattle infected with *E. coli* 0157:H7 show few signs of illness, the rise of huge feedlots, slaughterhouses, and hamburger grinders seems to have provided the means for this pathogen to become widely dispersed in the nation's food supply. American meat production has never before been so centralized: 13 large packinghouses now slaughter most of the cattle consumed in the USA.

Over the past 2 decades, scientists have discovered more than a dozen other new foodborne pathogens, including *Campylobacter jejuni*, *Cryptosporidium parvum*, *Cyclospora cayetanensis*, *Listeria monocytogenes*, and Norwalk-like viruses. The CDC estimates that >75% of the food-related illnesses and deaths in the USA are caused by infectious agents that have not yet been identified.

Although some important insights into the links between modern food processing and the spread of dangerous diseases have been gained, the nation's leading agribusiness firms have resolutely opposed any further regulation of their food safety practices. They have managed to avoid the sort of liability routinely imposed on the manufacturers of most consumer products.

TEN GOOD FOODS

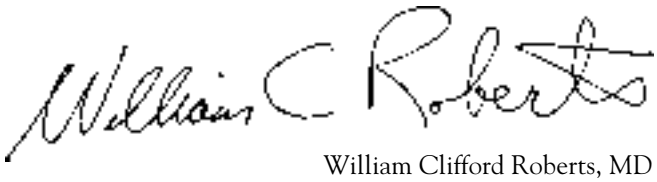
On January 21, 2002, *Time* magazine featured an article entitled "The Science of Staying Healthy" (3). In it was a section on 10 splendid foods: *tomatoes, spinach, broccoli, nuts, oats, garlic, blueberries, salmon, green tea,* and *red wine*. What makes these 10 so healthy is the presence of various phytochemicals or antioxidants or vitamins (C and E), folate, and fiber (beta-glucan). In contrast, one food was stressed as being particularly bad, and that was potatoes. The problem with potatoes, according to Meir Stampfer, a nutrition professor at Harvard School of Public Health, is potato starch. When a potato is eaten, the starch portion contacts the saliva in the mouth, and its tightly bundled molecules immediately get turned into sugars. Thus, when a person eats a potato, the body gets essentially pure glucose. The flood of blood sugars sets off a chain reaction. Insulin pours out of the pancreas. The triglycerides shoot up, and high-density lipoprotein cholesterol takes a dive. This same problem occurs when people eat white bread, bagels, and most white rice. In contrast to the usual potato, sweet potatoes and yams metabolize less rapidly and have much less effect on the blood sugar level.

THE GREATEST INVENTIONS OF THE PAST 2000 YEARS

My son Cliff recently gave me the book entitled *The Greatest Inventions of the Past 2,000 Years* (4). Its editor, John Brockman, gathered some of the world's foremost scientific and creative thinkers and asked them for their responses to the following questions: "What is the most important invention in the past 2000 years?" and "Why?" He received answers from >90 people. Not all of the respondents limited their answers to concrete objects. Some chose ideas as the greatest "inventions": the concept of free will, marketing, democracy and social justice, the scientific method, our disbelief in the supernatural, natural selection, the concept of education, philosophical skepticism, the information economy, the idea of continued scientific and technologic progress, the control group, secularism, the interrogative sentence (the asking of questions), probability theory, human ego, the empirical method, the incompleteness theorem, the idea of unconscious, quantum theory, Christianity and Islam, mathematical representation, and the idea of an idea. The printing press received the most votes, followed by the Indo-Arabic counting system, lenses (including the telescope and microscope), the computer, calculus, "the pill," television, the battery, and mathematical representation. All the others received a single vote and included such things as the electric motor, telecommunications technology, the plow, the static electric machine, caravel, organized science, the Green revolution, the electric light, aspirin, the thermos bottle, flying machines, the university, the eraser, the harnessing of electricity, waterworks, classical music, the Internet, distillation, universal schooling, the 33-year English Protestant calendar, the stirrup and horse collar, social structures that enable inventions, the digital bit, reading glasses, papermaking, hay, the universal Turing machine, chairs and stairs, double-entry accounting, the Gatlin gun, domestication of the horse, the thermionic valve, public key cryptosystems, anesthesia, late 20th-century health care, the city, a basket, the alphabet, space travel, the clock, the bell and symphony orchestra, board games, the mirror, the spectroscope, and the flag. Dr. Samuel Barondes nominated "organized science," namely scientific societies and journals that foster the accumulation and dissemination of knowledge based on evidence rather than authority or revelation. Before the invention of these organizations, the accumulation of scientific knowledge was slow, because there were no established venues for communication and criticism, essential processes that stimulate new ideas, refute the untenable, and provide a system of recognition and reward based on merit and true achievement.

PLASMA HOMOCYSTEINE, DEMENTIA, AND ALZHEIMER'S DISEASE

Elevated plasma homocysteine levels have been associated with an increased risk of atherosclerotic sequelae, including death from cardiovascular causes, coronary heart disease, carotid atherosclerosis, and stroke. These observations led to the hypothesis that elevated plasma homocysteine may be a risk factor for dementia and Alzheimer's disease. Seshadri and colleagues (5) from Boston studied 1092 subjects without dementia (mean age, 76 years) from the Framingham Study. They examined the relation of the plasma total homocysteine level measured at baseline to the risk of newly diagnosed dementia on follow-up. Over a median follow-up period of 8 years, dementia developed in 111 subjects, including 83 with Alzheimer's disease. The risk of dementia and Alzheimer's disease increased as the plasma homocysteine level increased. With a plasma homocysteine level >14 μmol/L, the risk of Alzheimer's disease nearly doubled. Thus, an increased plasma homocysteine level is a strong independent risk factor for the development of dementia and Alzheimer's disease.



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